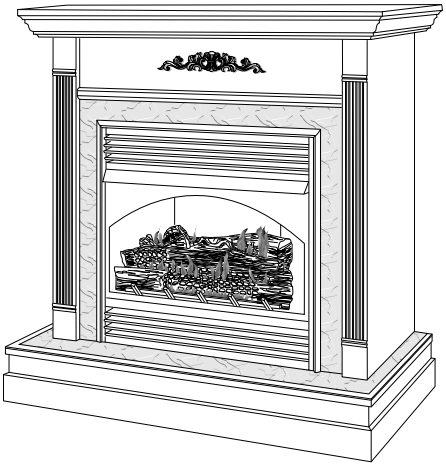
VANGUARD®

UNVENTED (VENT-FREE) NATURAL GAS FIREPLACE

OWNER'S OPERATION AND INSTALLATION MANUAL

Variable Manually-Controlled Model VSGF28NVA
Thermostatically-Controlled Model VSGF28NTC
with
Split Oak Logs



DESIGN CERTIFIED

Shown with optional cabinet mantel, hearth base, and trim accessories.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

- **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**
- **WHAT TO DO IF YOU SMELL GAS**
  - **Do not try to light any appliance.**
  - **Do not touch any electrical switch; do not use any phone in your building.**
  - **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
  - **If you cannot reach your gas supplier, call the fire department.**
- **Installation and service must be performed by a qualified installer, service agency, or the gas supplier.**

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.

WARNING: This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Air for Combustion and Ventilation* section on page 4 of this manual.

This appliance may be installed in an aftermarket*, permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

*** Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer**

Save this manual for future reference.

VANGUARD®

UNVENTED NATURAL GAS FIREPLACE

SAFETY INFORMATION

⚠ WARNINGS

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosion, electrical shock, and carbon monoxide poisoning.

⚠ DANGER: Carbon monoxide poisoning may lead to death!

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the fireplace may not be working properly. **Get fresh air at once!** Have fireplace serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

Natural Gas: Natural gas is odorless. An odor-making agent is added to the gas. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

⚠ WARNING: Any change to this heater or its controls can be dangerous.

⚠ WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns. Ceiling fans can create drafts that alter burner flame patterns. Altered burner patterns can cause sooting.

⚠ WARNING: Do not use a blower insert, heat exchanger insert, or other accessory not approved for use with this fireplace.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Do not place clothing or other flammable material on or near the appliance. Never place any objects on the heater.

Fireplace front and screen become very hot when running fireplace. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.

Carefully supervise young children when they are in the room with fireplace. When using the hand-held remote accessory, keep selector switch in the OFF position to prevent children from turning on burners with remote.

You must operate this fireplace with the fireplace screen and hood in place. Make sure fireplace screen and hood are in place before running fireplace.

Keep the appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.
2. If you smell gas
   - shut off gas supply
   - do not try to light any appliance
   - do not touch any electrical switch; do not use any phone in your building
   - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
   - if you cannot reach your gas supplier, call the fire department
3. This fireplace shall not be installed in a bedroom or bathroom.
4. Do not use this fireplace as a wood-burning fireplace. Use only the logs provided with the fireplace.
5. Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting. Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.
6. This fireplace is designed to be smokeless. If logs ever appear to smoke, turn off fireplace and call a qualified service person. *Note:* During initial operation, slight smoking could occur due to log curing and fireplace burning manufacturing residues.
7. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance,* page 18.
8. Before using furniture polish, wax, carpet cleaner, or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
9. This fireplace needs fresh air ventilation to run properly. This fireplace has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the fireplace if not enough fresh air is available. See *Air for Combustion and Ventilation,* pages 4 through 6. If fireplace keeps shutting off, see *Troubleshooting,* pages 19 through 21.
10. Do not run fireplace
    - where flammable liquids or vapors are used or stored
    - under dusty conditions
11. Do not use this fireplace to cook food or burn paper or other objects.
12. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.
13. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
14. Turn fireplace off and let cool before servicing. Only a qualified service person should service and repair fireplace.
15. Operating fireplace above elevations of 4,500 feet could cause pilot outage.
16. Provide adequate clearances around air openings.

PRODUCT IDENTIFICATION

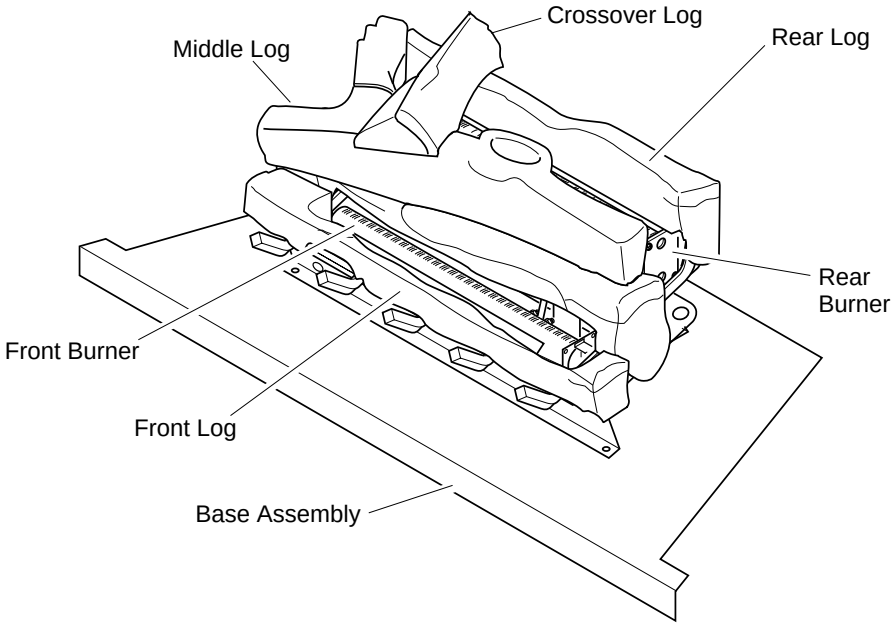


Figure 1 - Log Base Assembly, Split Oak Set

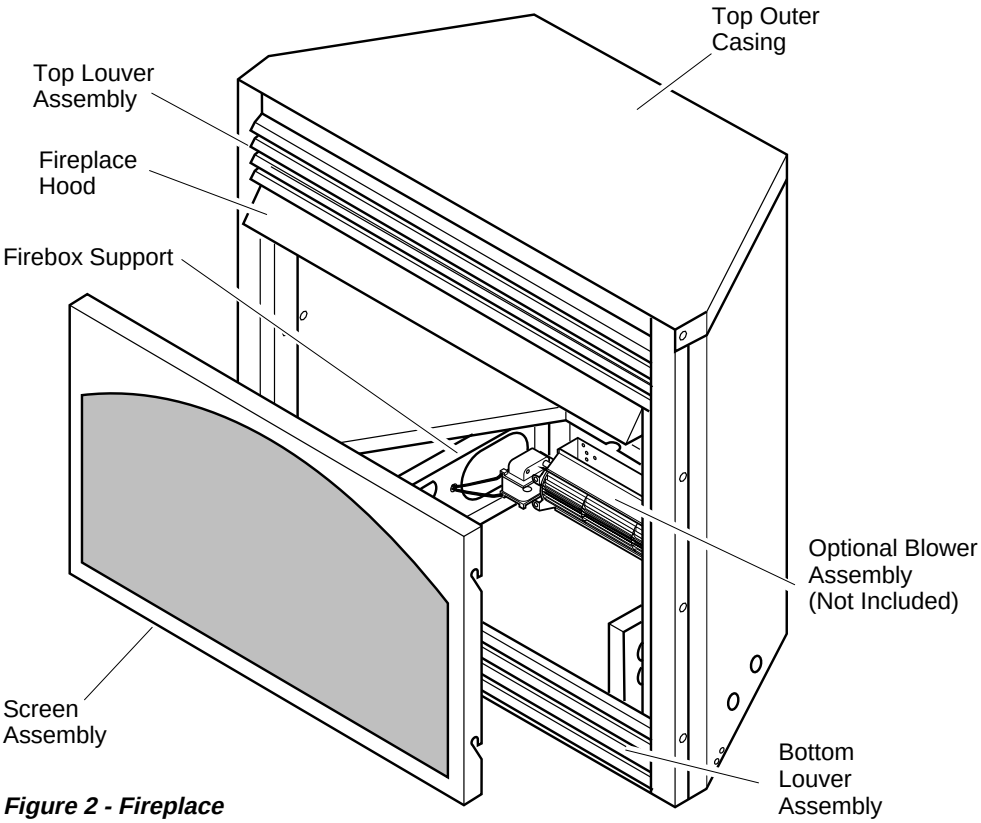


Figure 2 - Fireplace

LOCAL CODES

Install and use fireplace with care. Follow all local codes. In the absence of local codes, use the latest edition of *The National Fuel Gas Code ANSI Z223.1/NFPA 54**.

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018

National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

UNPACKING

⚠ WARNING: Do not remove the data plates attached to the heater base assembly. The data plates contain important warranty information.

1. With utility knife, cut the carton all the way around above the staples on the bottom tray. Lift the carton off the heater. Remove packing. *Note:* The hood is located in the packing on the right hand side of the heater front. Lift the heater off the bottom tray.
2. Locate two screws above top corners of the fireplace screen. Remove and discard these screws. Lift fireplace screen up and pull out to remove.
3. Remove protective packaging applied to logs, log base assembly, and fireplace.
4. Remove fireplace hood from carton insert.
5. Check all items for any shipping damage. If damaged, promptly inform dealer where you bought fireplace.

PRODUCT FEATURES

OPERATION

This vent-free fireplace is clean burning. It requires no outside venting. There is no heat loss out a vent or up a chimney. Heat is generated by both realistic flames and glowing embers. When used without the blower, the fireplace requires no electricity making it ideal for emergency backup heat.

SAFETY DEVICE

This fireplace has a pilot with an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS/pilot is a required feature for vent-free room heaters. The ODS system shuts off the fireplace if there is not enough fresh air.

PIEZO IGNITION SYSTEM

This fireplace has a piezo ignitor. This system requires no matches, batteries, or other sources to light fireplace.

BLOWER ASSEMBLY (VSGF28NTC)

This fireplace has a blower assembly. The blower operates thermostatically and has a variable speed control. The blower circulates heated air from the fireplace into the room. Use of blower is optional. Optional blower accessories are available for model VSGF28NVA.

THERMOSTAT CONTROL (VSGF28NTC)

This fireplace has a thermostat sensing bulb and a control valve. The thermostat controls the heat output and flame height. This maintains a consistent room temperature. Even the lowest setting provides realistic flames and glowing embers from two burners. Selecting higher comfort settings allows fireplace to run longer, producing greater heat output. At lower comfort settings, the fireplace will run less. This results in increased heating comfort. This can also result in lower gas bills.

VARIABLE MANUAL CONTROL (VSGF28NVA)

This fireplace has a variable manual control valve which allows the user to choose the heat setting that best suits his needs. Any setting between low and high may be selected by simply turning the control knob.

AIR FOR COMBUSTION AND VENTILATION

⚠ WARNING: This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air. Read the following instructions to insure proper fresh air for this and other fuel-burning appliances in your home.

Today's homes are built more energy efficient than ever. New materials, increased insulation, and new construction methods help reduce heat loss in homes. Home owners weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, home owners want their homes as airtight as possible.

While it is good to make your home energy efficient, your home needs to breathe. Fresh air must enter your home. All fuel-burning appliances need fresh air for proper combustion and ventilation.

Exhaust fans, fireplaces, clothes dryers, and fuel burning appliances draw air from the house to operate. You must provide adequate fresh air for these appliances. This will insure proper venting of vented fuel-burning appliances.

PROVIDING ADEQUATE VENTILATION

The following are excerpts from *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation.*

All spaces in homes fall into one of the three following ventilation classifications:

1. Unusually Tight Construction
2. Unconfined Space
3. Confined Space

The information on pages 4 through 6 will help you classify your space and provide adequate ventilation.

Unusually Tight Construction

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

Unusually tight construction is defined as construction where:

a. walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6 x 10^{-11} kg per pa-sec-m^2) or less with openings gasketed or sealed *and*

b. weather stripping has been added on openable windows and doors *and*

c. caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If your home meets all of the three criteria above, you must provide additional fresh air. See *Ventilation Air From Outdoors*, page 6.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow for Fireplace Location* on page 5.

Confined Space and Unconfined Space

The National Fuel Gas Code, ANSI Z223.1/NFPA 54 defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed*, through openings not furnished with doors, are considered a part of the unconfined space.

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

* Adjoining rooms are communicating only if there are doorless passageways or ventilation grills between them.

AIR FOR COMBUSTION AND VENTILATION

Continued

DETERMINING FRESH-AIR FLOW FOR FIREPLACE LOCATION

Determining if You Have a Confined or Unconfined Space

Use this work sheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install fireplace plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

1. Determine the volume of the space (length x width x height).

   Length x Width x Height = _____cu. ft. (volume of space)

   Example: Space size 22 ft. (length) x 18 ft. (width) x 8 ft. (ceiling height) = 3168 cu. ft. (volume of space)

   If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

2. Multiply the space volume by 20 to determine the maximum Btu/Hr the space can support.

   _____ (volume of space) x 20 = (Maximum Btu/Hr the space can support)

   Example: 3168 cu. ft. (volume of space) x 20 = 63,360 (maximum Btu/Hr the space can support)

3. Add the Btu/Hr of all fuel burning appliances in the space.

Vent-free fireplace		_____	Btu/Hr
Gas water heater*		_____	Btu/Hr
Gas furnace		_____	Btu/Hr
Vented gas heater		_____	Btu/Hr
Gas fireplace logs		_____	Btu/Hr
Other gas appliances*	+	_____	Btu/Hr
Total	=	_____	Btu/Hr

Example:

Gas water heater		40,000	Btu/Hr
Vent-free fireplace	+	28,000	Btu/Hr
Total	=	68,000	Btu/Hr

   * Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

4. Compare the maximum Btu/Hr the space can support with the actual amount of Btu/Hr used.

   _____ Btu/Hr (maximum the space can support)

   _____ Btu/Hr (actual amount of Btu/Hr used)

   Example: 63,300 Btu/Hr (maximum the space can support)

   68,000 Btu/Hr (actual amount of Btu/Hr used)

The space in the above example is a confined space because the actual Btu/Hr used is more than the maximum Btu/Hr the space can support. You must provide additional fresh air. Your options are as follows:

A. Rework work sheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air from Inside Building*, page 6.

B. Vent room directly to the outdoors. See *Ventilation Air from Outdoors*, page 6.

C. Install a lower Btu/Hr fireplace, if lower Btu/Hr size makes room unconfined.

If the actual Btu/Hr used is less than the maximum Btu/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

⚠ WARNING: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54 Section 5.3* or applicable local codes.

Continued

AIR FOR COMBUSTION AND VENTILATION
Continued

VENTILATION AIR

Ventilation Air From Inside Building

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 3). You can also remove door into adjoining room (see option 3, Figure 3). Follow the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

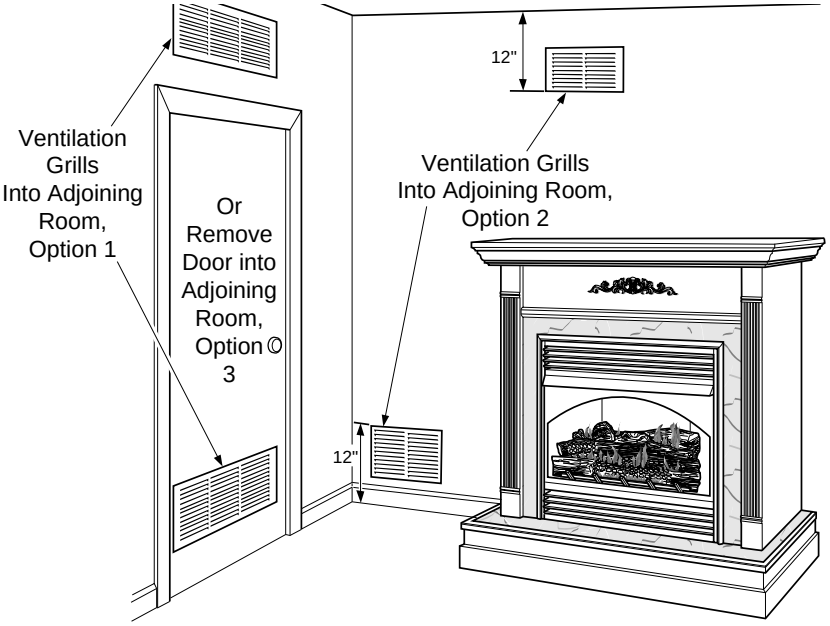

12"
Ventilation Grills Into Adjoining Room, Option 1
Or Remove Door into Adjoining Room, Option 3
Ventilation Grills Into Adjoining Room, Option 2
12"

Figure 3 - Ventilation Air from Inside Building

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

IMPORTANT: Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

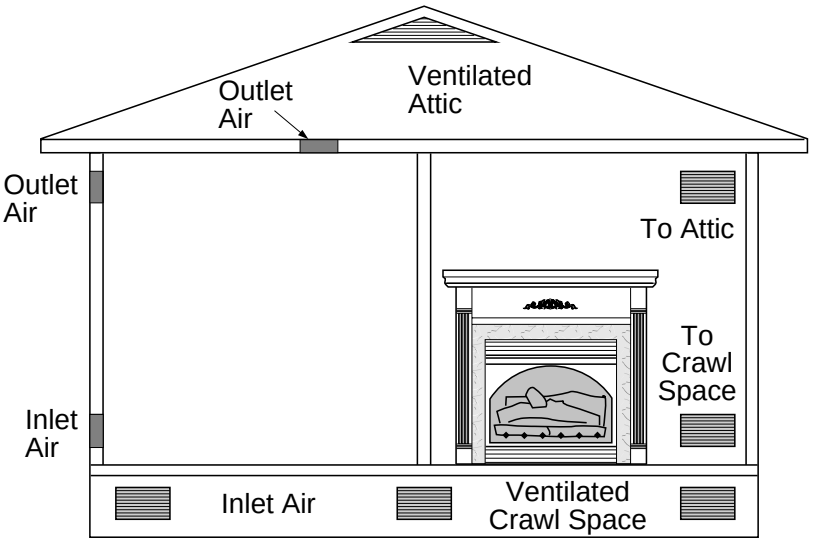


Figure 4 - Ventilation Air from Outdoors

INSTALLATION

⚠ WARNING: A qualified service person must install fireplace. Follow all local codes.

NOTICE: This heater is intended for use as supplemental heat. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this heater as your primary heat source.

⚠ WARNING: Never install the fireplace
- **in a bedroom or bathroom**
- **in a recreational vehicle**
- **where curtains, furniture, clothing, or other flammable objects are less than 42 inches from the front, top, or sides of the fireplace**
- **in high traffic areas**
- **in windy or drafty areas**

⚠ WARNING: Model VSGF28NTC has a three-prong, grounded electrical plug. This plug helps protect you against electrical shock. Only connect plug to a properly grounded, three-prong receptacle. Do not cut or remove the grounding prong from this plug.

⚠ CAUTION: This fireplace creates warm air currents. These currents move heat to wall surfaces next to fireplace. Installing fireplace next to vinyl or cloth wall coverings or operating heater where impurities (such as, but not limited to, tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls or cause odors.

Note: Your fireplace is designed to be used in zero clearance installations. Wall or framing material can be placed directly against any exterior surface on the rear, sides, or top of your fireplace, except where standoff spacers are integrally attached. If standoff spacers are attached to your fireplace, these spacers can be placed directly against wall or framing materials.

Use the dimensions shown for rough openings to create the easiest installation (see *Built-In Fireplace Installation*, pages 9 and 10).

IMPORTANT: Vent-free heaters add moisture to the air. Although this is beneficial, installing fireplace in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Air for Combustion and Ventilation*, pages 4 through 6.

IMPORTANT: Make sure the fireplace is level. If fireplace is not level, log set will not work properly.

CHECK GAS TYPE

Use only natural gas. If your gas supply is not natural gas, do not install fireplace. Call dealer where you bought fireplace for proper type fireplace.

⚠ WARNING: Never connect fireplace to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

ELECTRICAL HOOKUP (Model VSGF28NTC or VSGF28NVA with GA3750 or GA3650T Series Blower)

This fireplace has a blower assembly with an electrical cord. The electrical cord is five feet in length. You must locate fireplace within reach of a 120 volt grounded electrical outlet. If not, you must install an electrical outlet within reach of fireplace power cord. The GA3555 outlet accessory may be used for built-in applications with blower installed. This same information applies if installing optional blower accessories to Model VSGF28NVA.

INSTALLING HOOD

Install hood to rail already installed in fireplace as shown in Figure 5. Use 3 Phillips screws provided.

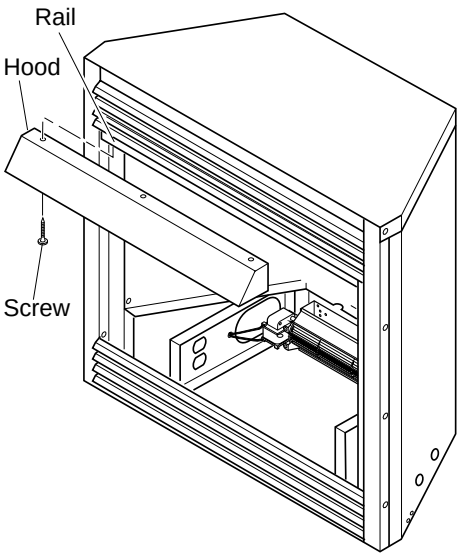


Figure 5 - Installing Hood

Continued

INSTALLATION
Continued

ASSEMBLING AND ATTACHING OPTIONAL BRASS TRIM (Included with Mantel Accessory)

IMPORTANT: If you are recessing the firebox in a wall, do not attach brass trim at this time. See page 9 for built-in fireplace installation.

Note: The instructions below show assembling and attaching brass trim to fireplace.

1. Remove packaging from three pieces of brass trim.
2. Locate four brass screws, two adjusting plates with set screws, and two shims in the hardware packet.
3. Align shim under adjusting plate as shown in Figure 6.
4. Slide one end of adjusting plate/shim in slot on mitered edge of top brass trim (see Figure 6).
5. Slide other end of adjusting plate/shim in slot on mitered edge of side brass trim (see Figure 6).
6. While firmly holding edges of brass trim together, tighten both set screws on the adjusting plate with slotted screwdriver.
7. Repeat steps 1 through 6 for other side.
8. Tighten trim hanging screws (#10 x 6.25 shoulder) into holes in cabinets. Place the assembled trim onto fireplace cabinet. Align hanging notches on trim with hanging screws on side of fireplace (see Figure 7). Push trim firmly into place, sliding hanging notches over hanging screws.

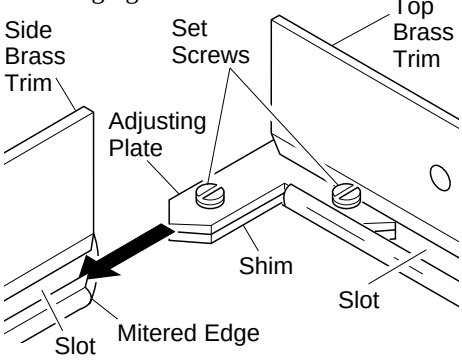


Figure 6 - Assembling Brass Trim

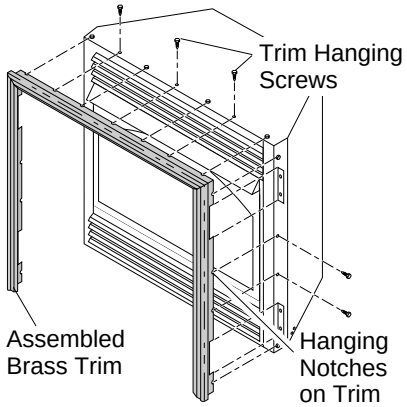


Figure 7 - Attaching Brass Trim to Fireplace

INSTALLATION CLEARANCES

⚠ WARNING: Maintain the minimum clearances. If you can, provide greater clearances from floor, ceiling, and adjoining wall.

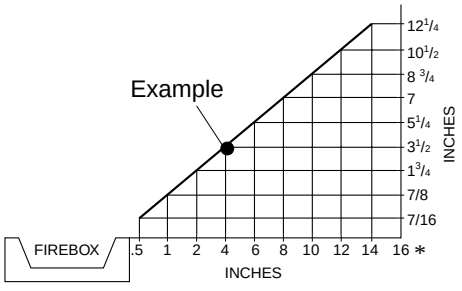
Carefully follow the instructions below. This will ensure safe installation.

Minimum Clearances For Side Combustible Material, Side Wall, and Ceiling

A. Clearances from the side of the fireplace cabinet to any combustible material and wall should follow diagram in Figure 8.

Example: The face of a mantel, bookshelf, etc. is made of combustible material and protrudes 3 1/2" from the wall. This combustible material must be 4" from the side of the fireplace opening (see Figure 8).

B. Clearances from the top of the fireplace opening to the ceiling should not be less than 42 inches.



*Minimum 16 inches from Side Wall

Figure 8 - Minimum Clearance for Combustible to Wall

CONVENTIONAL FIREPLACE INSTALLATION

Conventional installation of this fireplace involves installing fireplace along with the corner or cabinet mantel with hearth base accessories against a wall in your home (see *Accessories*, page 22 and 23). Follow the instructions below to install the fireplace in this manner.

Note: The instructions below show installation using the cabinet mantel and the G3000F/G3001U/G3004W/G3006F/G3007U series hearth base accessories. The hearth base accessory shown is optional for this installation. You can install fireplace and cabinet/corner mantel directly on the floor. The corner mantel accessory cannot be installed with the G3000F/G3001U/G3004W/G3006F/G3007U hearth base. The corner mantel can be paired with the G3008F/G3009U/G3010F corner hearth base. If mounting fireplace and cabinet or corner mantel to the floor, an optional G3005 Slim Base kit may be installed.

1. Assemble cabinet mantel, hearth base, and trim accessories. Assembly instructions are included with each accessory.
2. When installing blower, install a properly grounded, 120 volt three-prong electrical outlet at fireplace location if an outlet is not there. If possible, locate outlet so cabinet mantel will cover it when installed (see Figure 9).
3. Install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, pages 10 and 11.

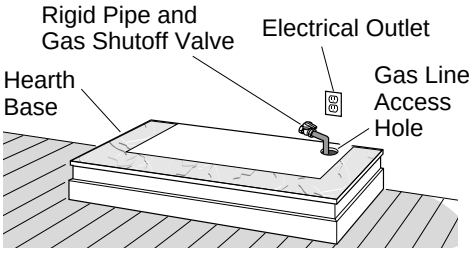


Figure 9 - Placing Hearth Base Accessory Against Wall

INSTALLATION
Continued

4. Place hearth base accessory against wall at installation location. Cut an access hole in hearth top to run gas line to fireplace (see Figure 9, page 8). Make sure to locate access hole so cabinet mantel will cover it when installed. *Note:* You can secure base to floor using wood screws. Countersink screw heads and putty over.
5. Route gas line through access hole in hearth base.
6. Center cabinet mantel on hearth base (see Figure 10). Make sure mantel is flush against wall.
7. Break off nailing flanges (see Figure 11) with hammer or pliers.
8. Place cardboard or other protective material on top of hearth base. Carefully set fireplace on protective material, with back of fireplace inside mantel opening.
9. If blower is installed, route blower electrical cord through access holes in either side of fireplace. *Note:* Bushing may be moved if necessary. Plug electrical cord into electrical outlet.

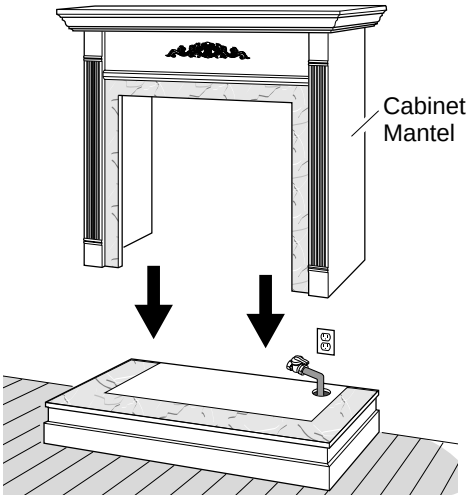


Figure 10 - Installing Cabinet Mantel

10. Carefully insert fireplace into cabinet mantel (Figure 12). Be careful not to scratch or damage hearth base, cabinet mantel, or any laminate trim on hearth base. Remove protective material from top of hearth base and from front of fireplace (if any). *Note:* You can secure fireplace to hearth or floor. Open lower louver. Locate screw holes in bottom of base. Tighten wood screws through these holes and into hearth or floor.
11. Attach gas line from fireplace gas regulator to gas supply. See *Connecting Fireplace to Gas Supply*, page 11.
12. Check all gas connections for leaks. See *Checking Gas Connections*, page 12.

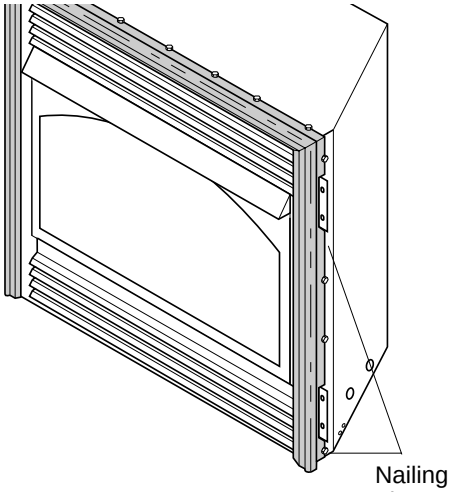


Figure 11 - Location of Nailing Flanges

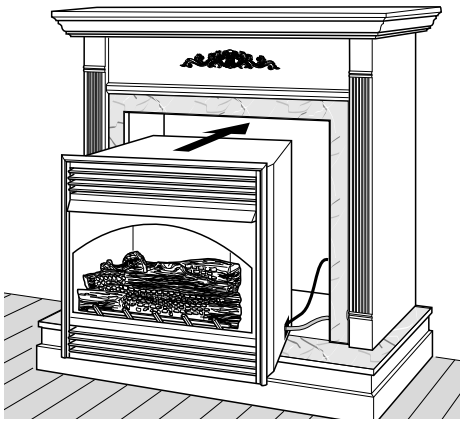


Figure 12 - Inserting Fireplace Into Cabinet Mantel

BUILT-IN FIREPLACE INSTALLATION

Built-in installation of this fireplace involves installing fireplace into a framed-in enclosure. This makes the front of fireplace flush with wall. If installing a mantel above the fireplace, you must follow the clearances shown in Figure 16, page 10 . Follow the instructions below to install the fireplace in this manner.

	Actual	Framing
Height	32 $^{3}/_{8}$"	33"
Front Width	34 $^{5}/_{16}$"	35 $^{1}/_{2}$"
Depth	16 $^{11}/_{16}$"	17 $^{3}/_{4}$"

1. Frame in rough opening. Use dimensions shown in Figure 13 for the rough opening.

   If installing in a corner, use dimensions shown in Figure 14, page 10 for the rough opening. The height is 33" which is the same as the wall opening above.
2. If using blower, install and properly ground GA3555, three-prong 120 volt electrical outlet, in fireplace. Follow instructions included in kit.
3. Install gas piping into fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, pages 10 and 11.

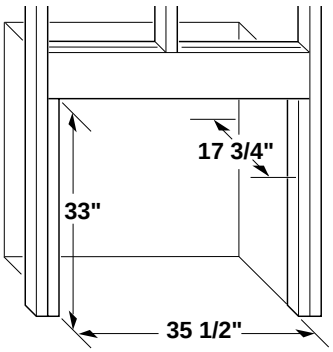


Figure 13 - Rough Opening for Installing in Wall

Continued

INSTALLATION
Continued

4. Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
5. Carefully insert fireplace into rough opening.
6. Attach flexible gas line to gas supply. See *Connecting Fireplace to Gas Supply*, page 11.
7. Attach fireplace to wall studs using nails or wood screws through holes in nailing flange (see Figure 15).
8. Check all gas connections for leaks. See *Checking Gas Connections*, page 12.
9. Plug electrical cord into electrical outlet installed in step 2, page 9.
10. Install brass trim after final finishing and/or painting of wall (see Figure 7, page 8).

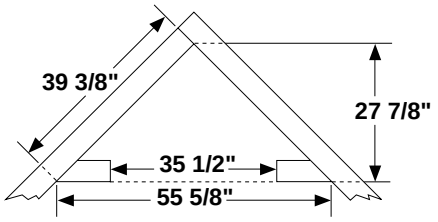


Figure 14 - Rough Opening for Installing in Corner

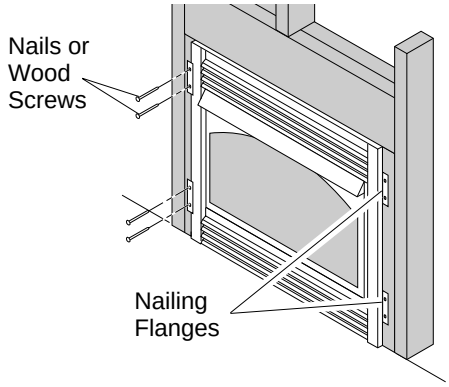


Figure 15 - Attaching Fireplace to Wall Studs

Mantel Clearances for Built-In Installation

If placing mantel above built-in fireplace, you must meet minimum clearance between mantel shelf and top of fireplace opening.

If your installation does not meet the below minimum clearances, you must:

- raise the mantel to an acceptable height,

OR

- remove the mantel.

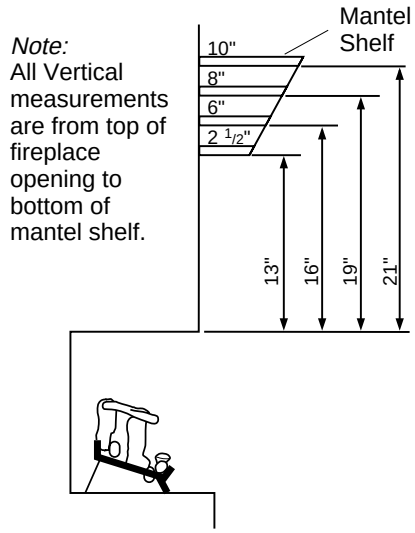


Figure 16 - Minimum Mantel Clearances for Built-In Installation

INSTALLING GAS PIPING TO FIREPLACE LOCATION

⚠ WARNING: This appliance requires a 1/2" NPT (National Pipe Thread) inlet connection to the pressure regulator.

⚠ WARNING: A qualified service person must connect fireplace to gas supply. Follow all local codes.

Installation Items Needed

Before installing fireplace, make sure you have the items listed below.

- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve *
- test gauge connection *
- sediment trap
- tee joint
- pipe wrench

* A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, pages 22 through 23.

⚠ WARNING: Never connect fireplace to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

⚠ CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to fireplace. If pipe is too small, undue loss of volume will occur.

INSTALLATION
Continued

Installation must include an equipment shutoff valve, and a plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see Figure 17).

IMPORTANT: Install equipment shutoff valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance.

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

Apply pipe joint sealant lightly to male NPT threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged fireplace valves. Never use thread sealant on flare threads.

⚠ CAUTION: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

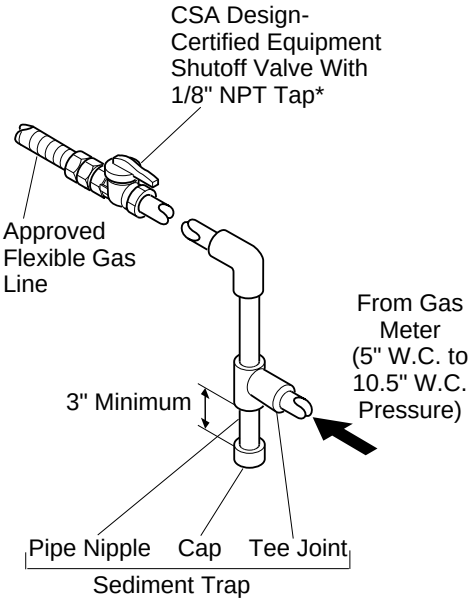


Figure 17 - Gas Connection

* Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, pages 22 and 23

We recommend that you install a sediment trap in supply line as shown in Figure 17. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and fireplace. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace gas controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.

CONNECTING FIREPLACE TO GAS SUPPLY

Installation Items Needed

- 5/16" hex socket wrench or nut-driver
- Phillips screwdriver
- sealant (resistant to propane/LP gas, not provided)

1. Remove fireplace screen. Remove two screws that hold fireplace screen in place for shipping. These screws are located near top of screen. Discard screws. Lift fireplace screen up and pull out to remove.
2. Remove screws that attach log base assembly to fireplace (see Figure 18). Carefully lift up log base assembly and remove from fireplace (see Figure 18).

Note: If adding the G8000 series brick liner accessory, install it now. Follow instructions in G8000 accessory kit.

⚠ CAUTION: Do not pick up log base assembly by burners. This could damage burners. Only handle base by grates.

3. Route gas line (provided by installer) from equipment shutoff through one of the access holes.

NOTICE: Most building codes do not permit concealed gas connections. A flexible gas line is provided to allow accessibility from the fireplace (see Figure 19). The flexible gas supply line connection to the equipment shutoff valve should be accessible.

4. Attach flexible gas line to gas supply (see Figure 19). Check connection of flexible gas line attached to gas regulator of fireplace (see Figure 19).
5. Check all gas connections for leaks. See *Checking Gas Connections*, page 12.
6. Replace log base assembly back into fireplace. Feed flexible gas line into fireplace base area while replacing log base assembly. Make sure the entire flexible gas line is in fireplace base area. Reattach log base assembly to fireplace with screws removed in step 2.

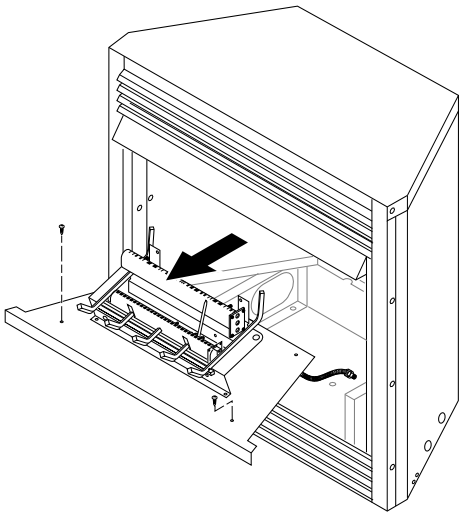


Figure 18 - Removing Log Base Assembly From Fireplace

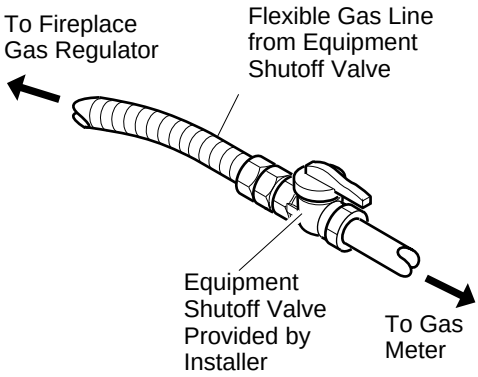

To Fireplace Gas Regulator
Flexible Gas Line from Equipment Shutoff Valve
Equipment Shutoff Valve Provided by Installer
To Gas Meter

Figure 19 - Attaching Flexible Gas Lines Together

Continued

INSTALLATION
Continued

CHECKING GAS CONNECTIONS

⚠ WARNING: Test all gas piping and connections for leaks after installing or servicing. Correct all leaks at once.

⚠ WARNING: Never use an open flame to check for a leak. Apply a noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.

Pressure Testing Gas Supply Piping System

Test Pressures In Excess Of 1/2 PSIG (3.5 kPa)

1. Disconnect fireplace with its main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage fireplace gas regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
4. Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Reconnect fireplace and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

1. Close equipment shutoff valve (see Figure 20).
2. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
3. Check all joints from gas meter to equipment shutoff valve (see Figure 21). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

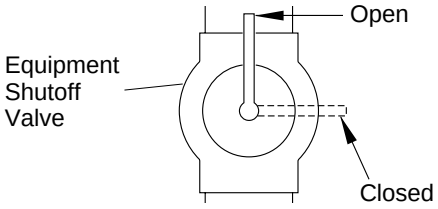


Figure 20 - Equipment Shutoff Valve

Pressure Testing Fireplace Gas Connections

1. Open equipment shutoff valve (see Figure 20).
2. Open main gas valve located on or near gas meter.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from equipment shutoff valve to gas control valve (see Figure 21). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operating Fireplace*, pages 14 through 17). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 15 [Thermostat-controlled models] or page 16 [Manually-controlled models]).

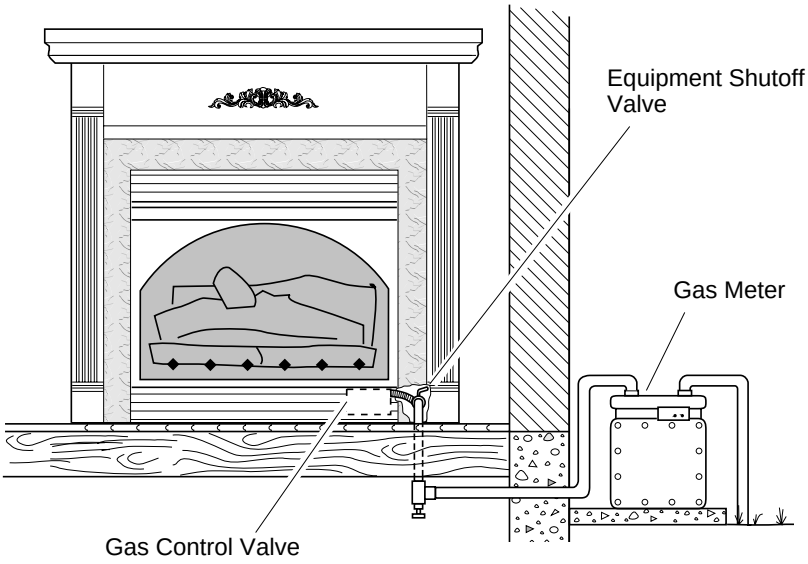


Figure 21 - Checking Gas Joints

INSTALLATION
Continued

INSTALLING LOGS

⚠ WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

⚠ CAUTION: Do not remove the metal data plates attached to the heater base assembly. The data plates contain important warranty information.

Each log is marked with a number. These numbers will help you identify the log when installing. It is very important to install these logs exactly as instructed. Do not modify logs. Only use logs supplied with heater.

1. Place front log (#1) on top of the grate. Make sure the notches in the bottom of the log fit over the grate prongs (see Figure 22). Push back of log flush with metal grate bar.
2. Rest middle log (#2) behind metal posts on front burner. Make sure the grooves in the bottom of the log fit over the grate. Bring the log forward next to the metal posts (see Figure 23).
3. Slide the grooves in the back of the rear log (#3) against the rear grate prongs. Make sure the peg on the log is on top (see Figure 24).
4. Place the crossover log (#4) on the rear log and the middle log. Make sure the peg on the rear log is in the hole in the bottom of the crossover log. The crossover log should fit in the cutout of the middle log (see Figure 25).
5. Install fireplace screen by slipping notches of fireplace screen over screws on front of fireplace (see Figure 26).

⚠ WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is in place before running fireplace.

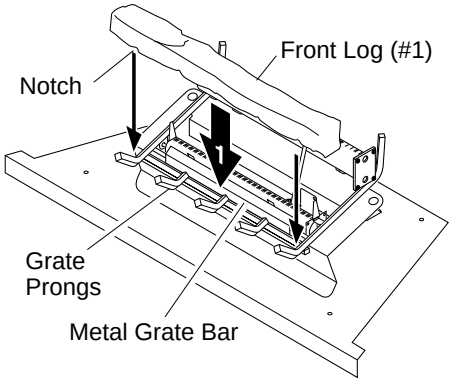


Figure 22 - Installing Front Log (#1)

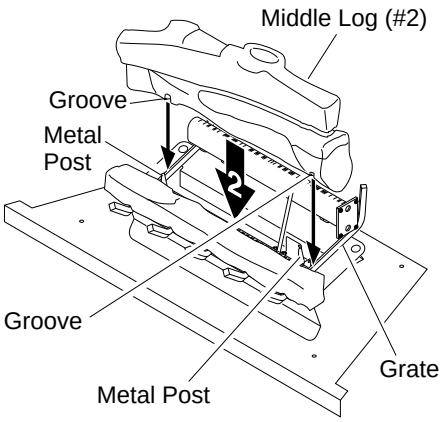


Figure 23 - Installing Middle Log (#2)

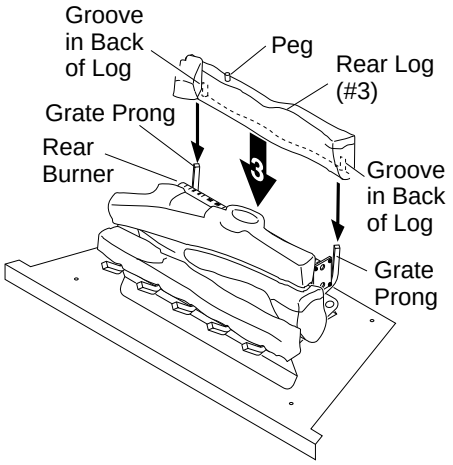


Figure 24 - Installing Rear Log (#3)

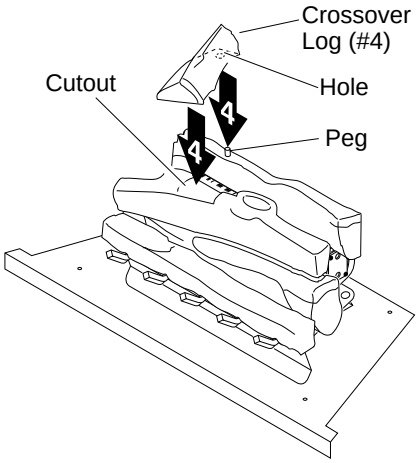


Figure 25 - Installing Crossover Log (#5)

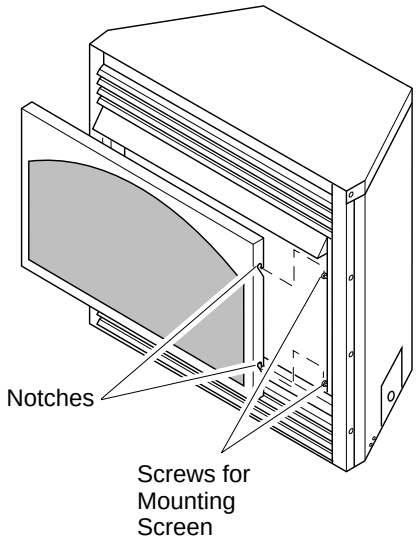


Figure 26 - Installing Fireplace Screen

OPERATING FIREPLACE

Thermostat-Controlled Models

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any appliance.**
- **Do not touch any electric switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

⚠ WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is installed before running fireplace.

NOTICE: During initial operation of new fireplace, burning logs will give off a paper-burning smell. Orange flame will also be present. Open window to vent smell. Operate fireplace on HI position to burn off odor. This will only last a few hours.

1. **STOP! Read the safety information in column 1.**
2. **Make sure equipment shutoff valve is fully open.**
3. **Turn control knob clockwise to the OFF position (see Figure 27).**
4. **Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information, column 1. If you don't smell gas, go to the next step.**
5. **Turn control knob counterclockwise to the PILOT position. Press in control knob for five (5) seconds (see Figure 27).**

   Note: **If running fireplace for first time, there will be air in gas line. You may need to press in control knob for 30 seconds or longer. This will allow air to bleed from the gas system.**

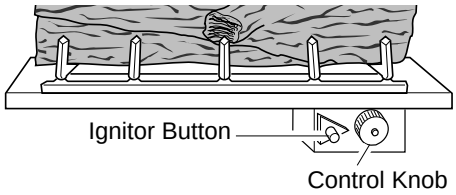


Figure 27 - Control Knob and Ignitor Button Location

6. **Continue pressing control knob in. Press and release ignitor button. This will light pilot. The pilot is attached to the front burner. If needed, keep pressing ignitor button until pilot lights.**

   Note: **If pilot does not stay lit, contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see *Manual Lighting Procedure,* page 15.**
7. **Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.**

   Note: **If pilot goes out, repeat steps 3 through 7. This fireplace has a safety interlock system. Wait one (1) minute for system to reset before lighting pilot again.**
   - **If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.**
8. **Turn control knob counterclockwise to desired heating level. The burners should light. Set control knob to any heat level between HI and LO.**

⚠ CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

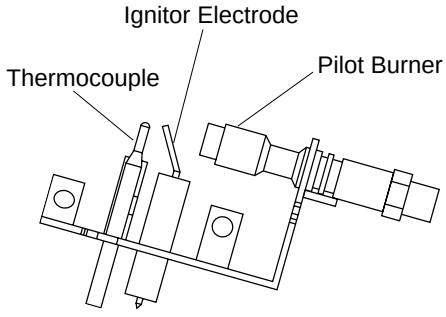


Figure 28 - Pilot

Continued

OPERATING FIREPLACE
Continued

TO TURN OFF GAS TO APPLIANCE

Shutting Off Fireplace

Turn control knob clockwise ↷ to the OFF position.

Shutting Off Burners Only (pilot stays lit)

Turn control knob clockwise ↷ to the PILOT position.

THERMOSTAT CONTROL OPERATION

You can set the thermostat control knob to any comfort level between HI and LO. The thermostat will gradually modulate the heat output and flame height from higher to lower settings, or pilot, in order to maintain the comfort level you select. The ideal comfort setting will vary by household depending upon the amount of space to be heated, the output of the central heating system, etc.

Note: **Selecting the HI setting will cause the burner to remain on without modulating down in most cases.**

MANUAL LIGHTING PROCEDURE

1. **Follow steps 1 through 5 under *Lighting Instructions*, page 14.**
2. **Depress control knob and light pilot with match.**
3. **Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow step 8 under *Lighting Instructions*, page 14.**

Manually-Controlled Models

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any appliance.**
- **Do not touch any electric switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

⚠ WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is installed before running fireplace.

NOTICE: During initial operation of new fireplace, burning logs will give off a paper-burning smell. Orange flame will also be present. Open window to vent smell. Operate fireplace on HI position to burn off odor. This will only last a few hours.

1. **STOP! Read the safety information in column 2.**
2. **Make sure equipment shutoff valve is fully open.**
3. **Turn control knob clockwise ↷ to the OFF position. (see Figure 29, page 16)**
4. **Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information, column 2. If you don't smell gas, go to the next step.**
5. **Slightly depress and turn control knob counterclockwise ↶ to the PILOT position. Press in control knob for five (5) seconds (see Figure 29, page 16).**

   Note: **If running fireplace for first time, there will be air in gas line. You may need to press in control knob for 30 seconds or longer. This will allow air to bleed from the gas system.**
6. **Continue pressing control knob in. Press and release ignitor button. This will light pilot. The pilot is attached to the front burner. If needed, keep pressing ignitor button until pilot lights.**

   Note: **If pilot does not stay lit, contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see *Manual Lighting Procedure*, page 16.**

OPERATING FIREPLACE
Continued

7. **Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.**

   Note: **If pilot goes out, repeat steps 3 through 7.**
   - **If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.**

8. **Slightly depress and turn control knob counterclockwise to the HIGH position. Both burners should light. Set control knob to either HIGH or LOW.**

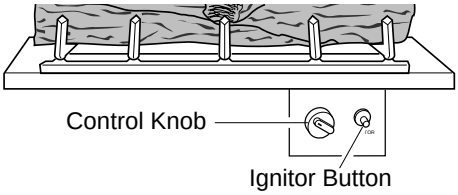


Figure 29 - Control Knob and Ignitor Button Location

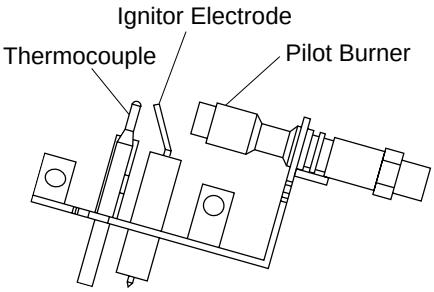


Figure 30 - Pilot

VARIABLE CONTROL OPERATION

The variable control valve can be set to any heat setting and flame height desired, by simply turning the control knob until that setting is attained. Even the lowest setting provides realistic flames and glowing embers from two burners. Selecting higher settings produces greater heat output. This results in increased heating comfort.

⚠ WARNING: Do not operate heater between locked positions.

⚠ CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

TO TURN OFF GAS TO APPLIANCE

Shutting Off Fireplace

1. **Turn control knob clockwise to the HIGH position.**
2. **Slightly depress control knob and turn clockwise to the PILOT position.**
3. **Slightly depress control knob and turn clockwise to the OFF position.**

Shutting Off Burners Only (pilot stays lit)

1. **Turn control knob clockwise to the HIGH position.**
2. **Press in and turn clockwise to the PILOT position.**

MANUAL LIGHTING PROCEDURE

1. **Follow steps 1 through 5 under *Lighting Instructions*, page 15.**
2. **Depress control knob and light pilot with match.**
3. **Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow step 8, column 1.**

Continued

OPERATING FIREPLACE
Continued

BLOWER OPERATION

MODEL VSGF28NTC

⚠ WARNING: This fireplace has a three-prong, grounded electrical plug. This plug helps protect you against electrical shock. Only connect plug to a properly grounded, three-prong receptacle. Do not cut or remove the grounding prong from this plug.

Locate the blower switch by opening lower louver on fireplace. Blower switch is located at lower left inside louver door.

This thermostat-controlled blower has a variable speed control with an ON/OFF switch. The blower will start when the thermostat senses a sufficient increase in firebox temperature.

Note: **It is safe to operate fireplace with blower turned off. However, the blower helps distribute heated air from the fireplace.**

MODEL VSGF28NVA

Blower Kit Model GA3750 Series

This optional non-thermostat blower kit features a variable control which allows you to select the speed you desire. After about 15 minutes, turn the blower on to deliver heated air at the top louvers. Follow the installation instructions on pages 8 and 9 of this manual.

IMPORTANT: **Light your gas appliance with the blower off.**

Note: **Periodically check the louvers of the firebox and remove any dust, dirt, or other obstructions.**

Blower Kit Model GA3650T Series

Locate the blower switch by opening the lower louver on fireplace. Blower switch is located at lower left inside louver door.

The GA3650T thermostat-controlled blower has a variable speed control with an ON/OFF switch. The blower will start when the thermostat senses a sufficient increase in firebox temperature.

IMPORTANT: **Light your gas appliance with the blower off.**

Note for GA3650T: **If you are using GA3650T blower, your gas fireplace and blower will not turn on and off at the same time. The fireplace may run for several minutes before the blower turns on. After the heater modulates to the pilot position, the blower will continue to run. The blower will shut off after the firebox temperature decreases.**

Note: **It is safe to operate fireplace with blower turned off. However, the blower helps distribute heated air from the fireplace.**

Note: **Periodically check the louvers of the firebox and remove any dust, dirt, or other obstructions.**

Follow installation instructions included with the blower accessory.

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 31 shows a correct pilot flame pattern. Figure 32 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching the thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the fireplace will shut down.

If pilot flame pattern is incorrect, as shown in Figure 32

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 15 [Thermostat-controlled models] or page 16 [Manually-controlled models])
- see *Troubleshooting*, pages 19 through 21

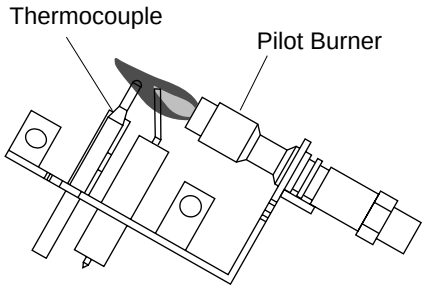


Figure 31 - Correct Pilot Flame Pattern

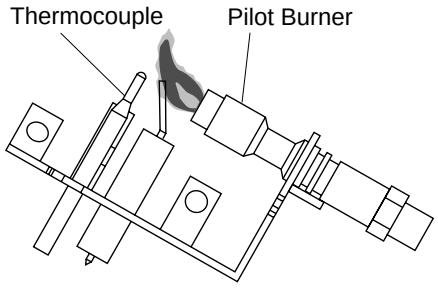


Figure 32 - Incorrect Pilot Flame Pattern

INSPECTING BURNERS
Continued

FRONT BURNER FLAME PATTERN

Figure 33 shows correct front burner flame pattern. Figure 34 shows incorrect front burner flame pattern. The incorrect burner flame pattern shows yellow tipping at top of blue flame.

⚠ WARNING: If front burner flame pattern shows yellow tipping, your fireplace could produce increased levels of carbon monoxide. Follow instructions at bottom of this page. Yellow flame on rear burner is normal.

NOTICE: Do not mistake orange flames with yellow tipping. Dirt or other fine particles are burned by fireplace, causing brief patches of orange flame.

If front burner flame pattern is incorrect, as shown in Figure 34

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 15 [Thermostat-controlled models] or page 16 [Manually-controlled models])
- see *Troubleshooting*, pages 19 through 21

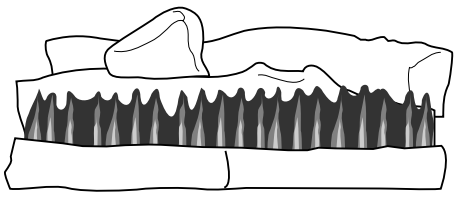


Figure 33 - Correct Front Burner Flame Pattern

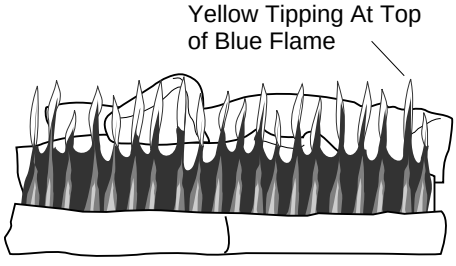


Figure 34 - Incorrect Front Burner Flame Pattern

CLEANING AND MAINTENANCE

⚠ WARNING: Turn off fireplace and let cool before cleaning.

⚠ CAUTION: You must keep control areas, burners, and circulating air passageways of fireplace clean. Inspect these areas of fireplace before each use. Have fireplace inspected yearly by a qualified service person. Fireplace may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

CLEANING BURNER INJECTOR HOLDER AND PILOT AIR INLET HOLE

The primary air inlet holes allow the proper amount of air to mix with the gas. This provides a clean burning flame. Keep these holes clear of dust, dirt, lint, and pet hair. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every three months during operation and have heater inspected yearly by a qualified service person.

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

1. Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
2. Inspect burner, pilot, and primary air inlet holes on injector holder for dust and dirt (see Figure 35).
3. Blow air through the ports/slots and holes in the burner.
4. Check the injector holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint, or pet hair with a soft cloth or vacuum cleaner nozzle.
5. Blow air into the primary air holes on the injector holder.
6. In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4.

Clean the pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (see Figure 36). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

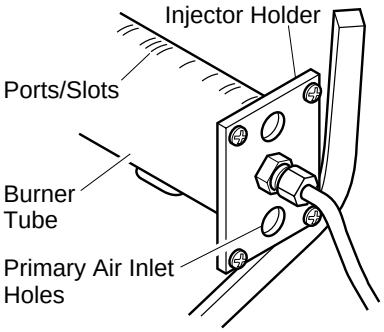


Figure 35 - Injector Holder On Outlet Burner Tube

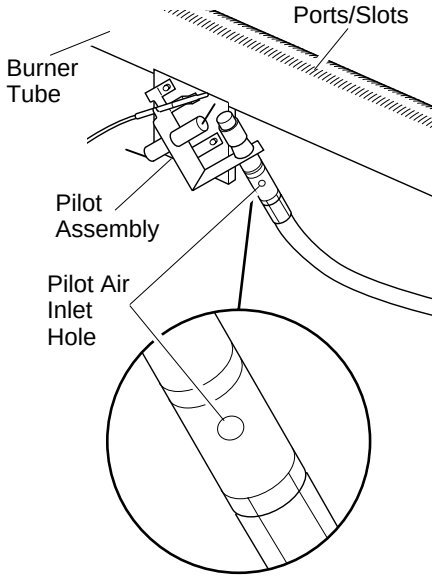


Figure 36 - Pilot Inlet Air Hole

LOGS

- If you remove logs for cleaning, refer to *Installing Logs*, page 13, to properly replace logs.
- Replace log(s) if broken or chipped (dime-sized or larger).

TROUBLESHOOTING

Note: For additional help, visit DESA International's technical service web site at **www.desatech.com**.

⚠ WARNING: Turn off fireplace and let cool before servicing. Only a qualified service person should service and repair fireplace.

⚠ CAUTION: Never use a wire, needle, or similar object to clean ODS/pilot. This can damage ODS/pilot unit.

Note: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot	1. Ignitor electrode not connected to ignitor cable	1. Reconnect ignitor cable
	2. Piezo ignitor nut is loose	2. Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel.
	3. Ignitor cable pinched or wet	3. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
	4. Broken ignitor cable	4. Replace ignitor cable
	5. Bad piezo ignitor	5. Replace piezo ignitor
	6. Ignitor electrode broken	6. Replace piezo ignitor
	7. Ignitor electrode positioned wrong	7. Replace piezo ignitor
When ignitor button is pressed, there is spark at ODS/pilot but no ignition	1. Gas supply turned off or equipment shutoff valve closed	1. Turn on gas supply or open equipment shutoff valve
	2. Control knob not in PILOT position	2. Turn control knob to PILOT position
	3. Control knob not pressed in while in PILOT position	3. Press in control knob while in PILOT position
	4. Air in gas lines when installed	4. Continue holding down control knob. Repeat igniting operation until air is removed
	5. ODS/pilot is clogged	5. Clean ODS/pilot (see *Cleaning and Maintenance*, page 18) or replace ODS/pilot assembly
	6. Gas regulator setting is not correct	6. Replace gas regulator
ODS/pilot lights but flame goes out when control knob is released	1. Control knob not fully pressed in	1. Press in control knob fully
	2. Control knob not pressed in long enough	2. After ODS/pilot lights, keep control knob pressed in 30 seconds
	3. Equipment shutoff valve not fully open	3. Fully open equipment shutoff valve
	4. Thermocouple connection loose at control valve	4. Hand tighten until snug, then tighten 1/4 turn more
	5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: A) Low gas pressure B) Dirty or partially clogged ODS/pilot	5. A) Contact local natural gas company B) Clean ODS/pilot (see *Cleaning and Maintenance*, page 18) or replace ODS/pilot assembly
	6. Thermocouple damaged	6. Replace thermocouple
	7. Control valve damaged	7. Replace control valve
	8. On thermostat models, safety interlock system has been triggered	8. Wait one minute for safety interlock system to reset. Repeat ignition operation

TROUBLESHOOTING
Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
One or both burners do not light after ODS/ pilot is lit	1. Burner orifice(s) clogged	1. Clean burner(s) (see *Cleaning and Maintenance*, page 18) or replace burner orifice(s)
	2. Burner orifice(s) diameter is too small	2. Replace burner orifice(s)
	3. Inlet gas pressure is too low	3. Contact local natural gas company
	4. Mislocated crossover tube	4. Contact qualified service person
Delayed ignition of one or both burners	1. Manifold pressure is too low	1. Contact local natural gas company
	2. Burner orifice(s) clogged	2. Clean burner(s) (see *Cleaning and Maintenance*, page 18) or replace burner orifice(s)
	3. Mislocated crossover tube	3. Contact qualified service person
Burner backfiring during combustion	1. Burner orifice is clogged or damaged	1. Clean burner (see *Cleaning and Maintenance*, page 18) or replace burner orifice
	2. Damaged burner	2. Replace damaged burner
	3. Gas regulator defective	3. Replace gas regulator
Yellow flame in front burner during burner combustion	1. Not enough air	1. Check burner(s) for dirt and debris. If found, clean burner(s) (see *Cleaning and Maintenance*, page 18)
	2. Gas regulator defective	2. Replace gas regulator
Slight smoke or odor during initial operation	1. Residues from manufacturing processes and logs curing	1. Problem will stop after a few hours of operation
Fireplace produces a whistling noise when burners are lit	1. Turning control knob to HI position when burners are cold	1. Turn control knob to LO position and let warm up for a minute
	2. Air in gas line	2. Operate burners until air is removed from line. Have gas line checked by local natural gas company
	3. Air passageways on fireplace blocked	3. Observe minimum installation clearances (see pages 8 through 10)
	4. Dirty or partially clogged burner orifice(s)	4. Clean burners (see *Cleaning and Maintenance*, page 18) or replace burner orifice(s)
White powder residue forming within burner box or on adjacent walls or furniture	1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. may turn into white powder residue	1. Turn heater off when using furniture polish, wax, carpet cleaners, or similar products
Dark residue on logs or inside of fireplace *Note:* After removing all causes of residue deposits, completely clean fireplace and appliance of all residue before reusing appliance.	1. Improper log placement	1. Properly locate logs (see *Installing Logs*, page 13)
	2. Drafts or other air currents affecting flame pattern	2. Eliminate source of drafts around heater
	3. Air holes at burner inlet blocked	3. Clean out air holes at burner inlet. Periodically repeat as needed
	4. Burner flame holes blocked	4. Remove blockage or replace burner

www.desatech.com

Continued

TROUBLESHOOTING
Continued

⚠ WARNING: If you smell gas
- **Shut off gas supply.**
- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

IMPORTANT: Operating fireplace where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces a clicking/ticking noise just after burners are lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common with most fireplaces. If noise is excessive, contact qualified service person
Fireplace produces unwanted odors	1. Fireplace burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See *IMPORTANT* statement above) 2. Gas leak. **See Warning statement above**	1. Open window and ventilate room. Stop using odor causing products while fireplace is running 2. Locate and correct all leaks (see *Checking Gas Connections*, page 12)
Fireplace shuts off in use (ODS operates)	1. Not enough fresh air is available 2. Low line pressure 3. ODS/pilot is partially clogged	1. Open window and/or door for ventilation 2. Contact local natural gas company 3. Clean ODS/pilot (see *Cleaning and Maintenance*, page 18)
Gas odor even when control knob is in OFF position	1. Gas leak. **See Warning statement above** 2. Control valve defective	1. Locate and correct all leaks (see *Checking Gas Connections*, page 12) 2. Replace control valve
Gas odor during combustion	1. Foreign matter between control valve and burner 2. Gas leak. **See Warning statement above**	1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see *Checking Gas Connections*, page 12)
Moisture/condensation noticed on windows	1. Not enough combustion/ventilation air	1. Refer to *Air for Combustion and Ventilation* requirements (page 4)

TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact DESA International's Technical Service Department at 1-800-672-6040.

You can also visit DESA International's technical services web site at **www.desatech.com.**

REPLACEMENT PARTS

Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA International's Technical Service Department at 1-800-672-6040.

When calling DESA International, have ready

- your name
- your address
- model and serial numbers of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane/LP or natural gas)
- purchase date

Usually, we will ask you to return the part to the factory.

PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA International at 1-800-672-6040 for referral information.

When calling DESA International, have ready

- model number of your fireplace
- the replacement part number

SERVICE HINTS

When Gas Pressure Is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- fireplace will not produce specified heat

You may feel your gas pressure is too low. If so, contact your local natural gas supplier.

WIRING DIAGRAM

⚠CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

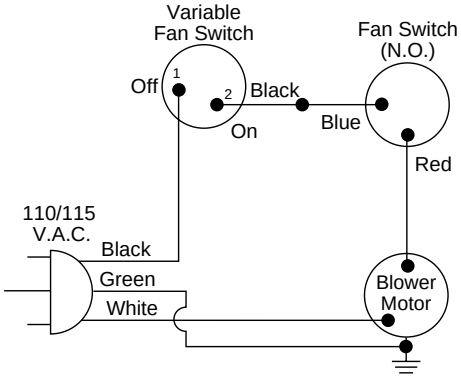


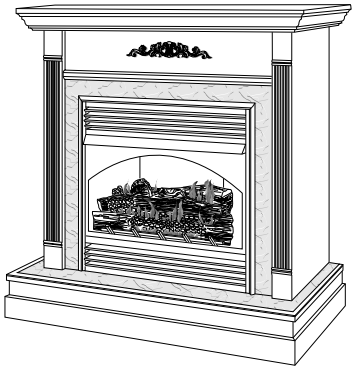
Figure 37 - Blower Wiring Diagram for Thermostat-Controlled Models

SPECIFICATIONS

Btu (Low/High)	20,000/28,000
Type Gas	Natural Gas Only
Ignition	Piezo
Manifold Pressure	3.4" W.C.
Inlet Gas Pressure (in. of water)	
Maximum	10.5"
Minimum	5"
Shipping Weight	100 lbs. T-stat Model 97 lbs. Manual Model

ACCESSORIES

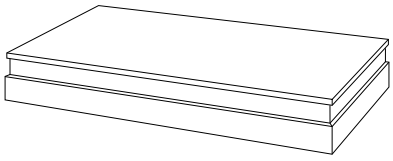
Purchase these fireplace accessories from your local dealer. If they can not supply these accessories, call DESA International's Sales Department at 1-800-672-6040 for information. You can also write to the address listed on the back page of this manual.



CABINET MANTEL

GMC11F Series - Walnut Finished
GMC12U Series - Unfinished
GMC13F Series - Oak Finished with Medium Stain
GM102W Series - Off-White Paint

Shown with optional base and laminate hearth and mantel trim accessories.
Dimensions (WxHxD): 56 3/4" x 48" x 22 3/4"



HARDWOOD HEARTH BASE

GC3333F Series- Walnut Finished
GC3334U Series - Unfinished
GC3335F Series - Oak Finished with Medium Stain
G3004W Series - Off-White Paint

The hearth base can be used with the cabinet mantels to create a handsome riser for the fireplace (cannot be used with corner mantel).
Dimensions (WxHxD): 58" x 6 1/2" x 28 9/16"

ACCESSORIES
Continued

SLIM HEARTH BASE (Not Shown)

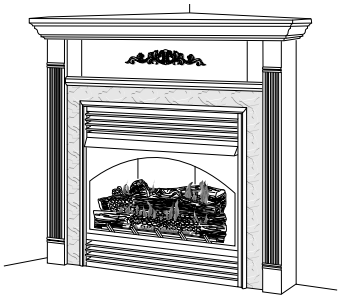
G3005J Series - Jade Marble Laminate

G3005S Series - Sandstone Marble Laminate

G3005B Series - Black Onyx Marble Laminate

The slim hearth base allows you to further customize your fireplace.

Dimensions (WxHxD): 41 7/8" x 5/8" x 10"

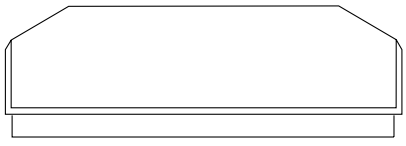


CORNER MANTEL

GMC36F Series - Walnut Finished
GMC37U Series - Unfinished
GM202F Series - Oak Finished

Shown with optional laminate mantel trim accessory.

Dimensions (WxHxD): 60 7/8" x 48 3/4" x 34 5/8"

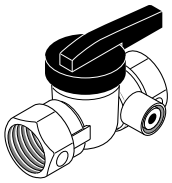


CORNER HEARTH BASE

G3008F Series - Walnut Finished
G3009U Series - Unfinished
G3010F Series - Oak Finished

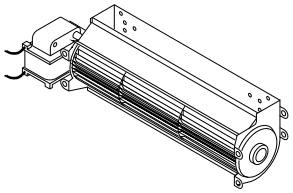
The corner hearth base is designed for use with the corner mantels to create a handsome riser for the fireplace.

Dimensions (WxHxD): 52 1/2" x 6" x 23 3/4"



EQUIPMENT SHUTOFF VALVE - GA5010

For all models. Equipment shutoff valve with 1/8" NPT tap. Fits 1/2" NPT pipe.



BLOWER ACCESSORIES FOR MANUALLY-CONTROLLED UNITS GA3750A & GA3650TB SERIES

Manual variable speed control and automatic thermostat variable control. A blower will increase air flow to maximize heat distribution.

FIREBOX BRICK LINER G8000 SERIES (Not Shown)

Ceramic fiber firebox liner adds the look of real brick.

BRASS TRIM ACCESSORY GA6090 (Not Shown)

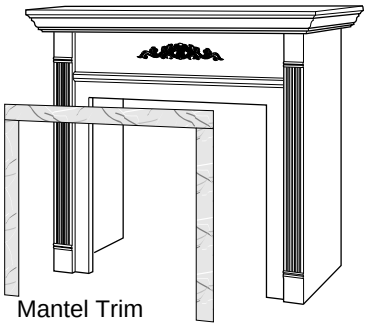
Included with accessory mantels

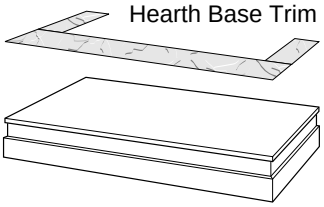
DUPLEX OUTLET KIT GA3555 (Not Shown)

For built-in installation

CLEANING KIT - GCK (Not Shown)

Your vent-free gas appliance requires regular cleaning and maintenance to prevent performance problems. This kit gives you the tools and instructions to make it easy to clean all critical areas of your appliance.





LAMINATE TRIM FOR HEARTH OR MANTEL

G3002J Series - Jade Marble Laminate Mantel Trim

G3003J Series - Jade Marble Laminate Hearth Base Trim

G3002S Series - Sandstone Marble Laminate Mantel Trim

G3003S Series - Sandstone Marble Laminate Hearth Base Trim

G3002B Series - Black Onyx Marble Laminate Trim

G3003B Series - Black Onyx Marble Laminate Hearth Base Trim

Mantel trim for cabinet or corner mantel. Hearth base trim for hardwood hearth bases.

INFORMATION VIDEO - 108917-01

For all models. A care and maintenance video is available by calling 1-866-672-6040.

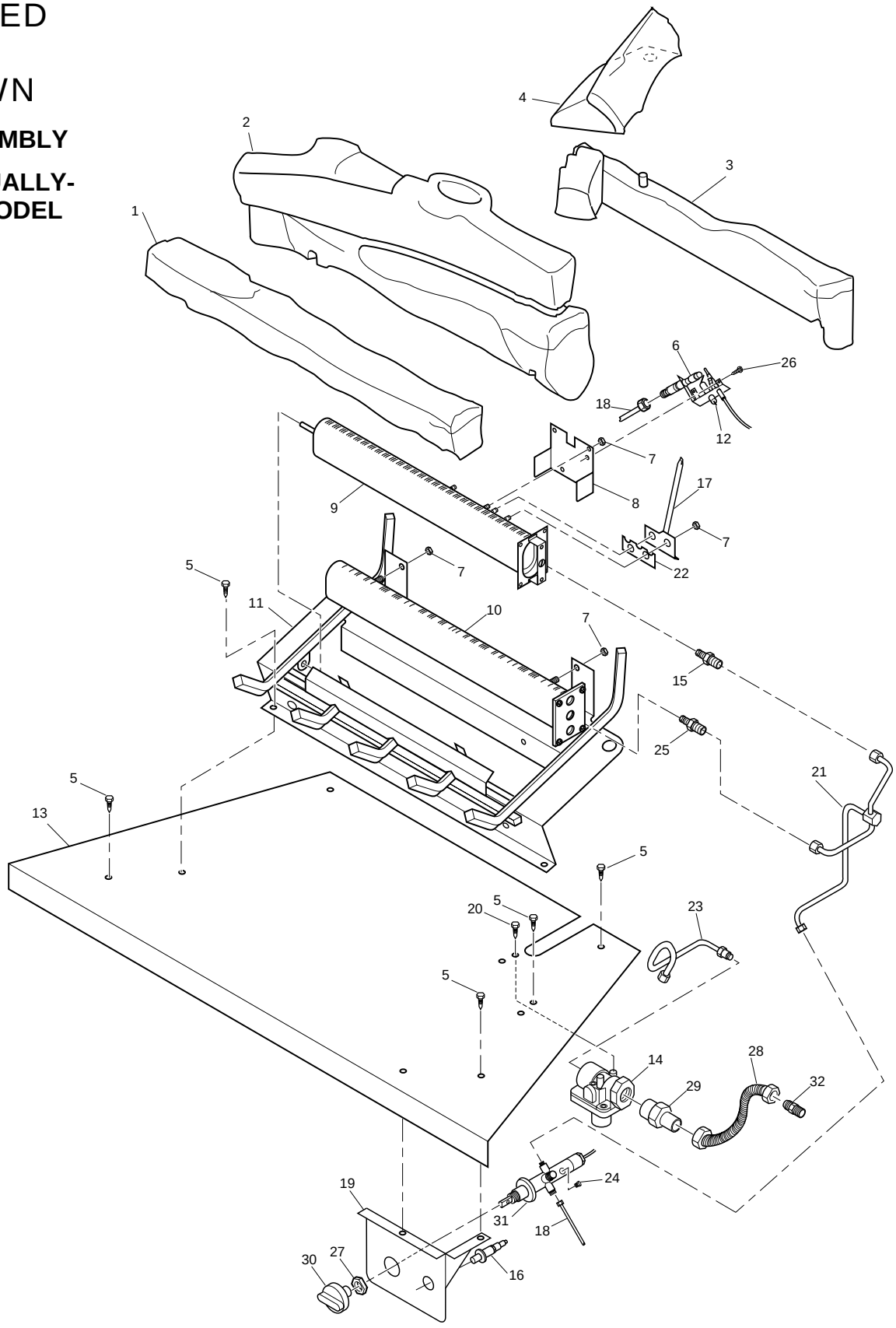
UNVENTED NATURAL GAS FIREPLACE

ILLUSTRATED PARTS BREAKDOWN

LOG BASE ASSEMBLY

VARIABLE MANUALLY-CONTROLLED MODEL

VSGF28NVA



PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 22 of this manual.

LOG BASE ASSEMBLY

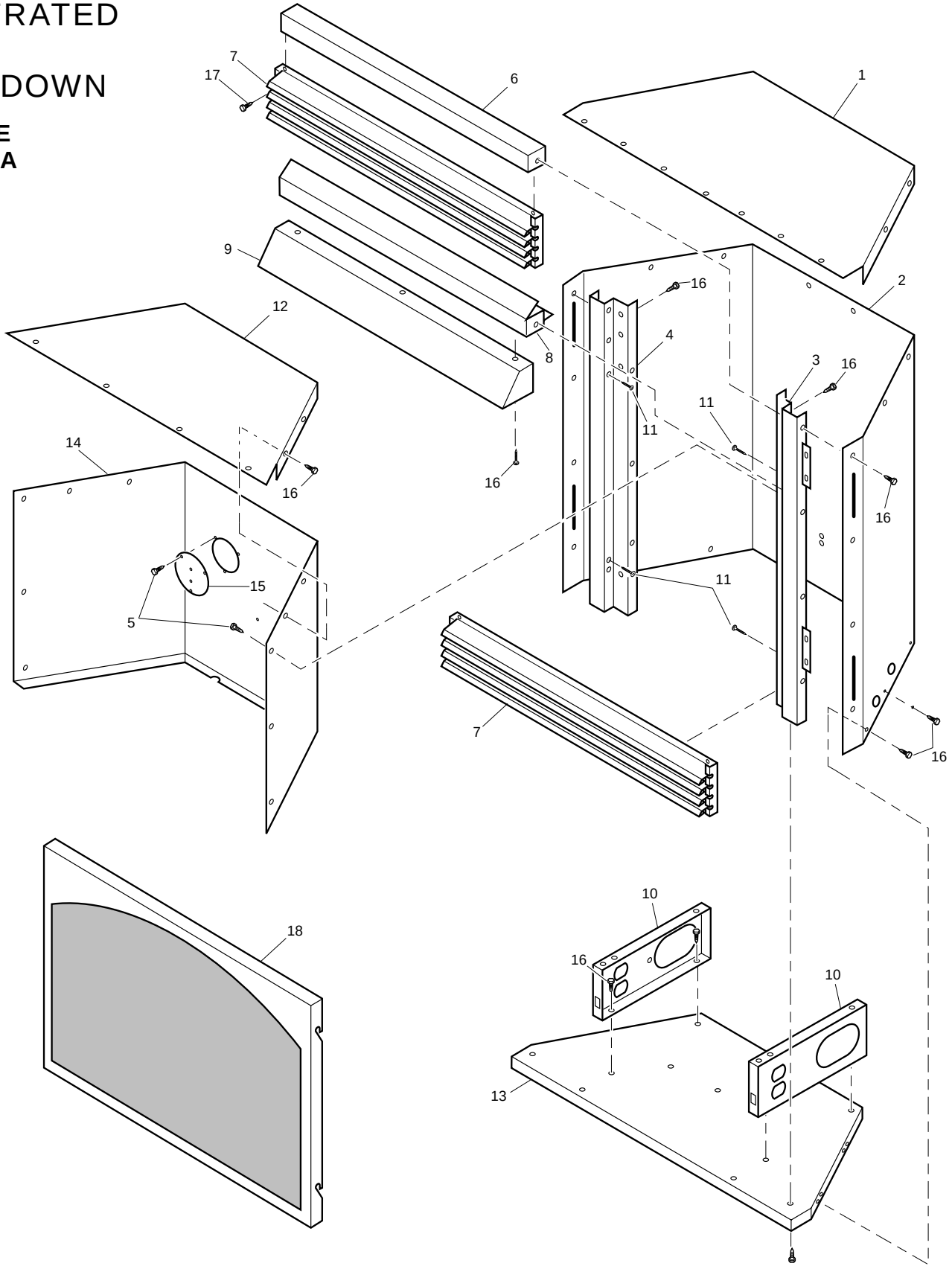
VARIABLE MANUALLY-CONTROLLED MODEL

VSGF28NVA

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	104388-02	Front Log (#1)	1
2	104390-02	Middle Log (#2)	1
3	104392-02	Rear Log (#3)	1
4	104394-02	Crossover Log (#4)	1
5	098304-01	Screw, #10 Phillips, Black	8
6	104285-01	ODS Pilot	1
7	098249-01	Nut	6
8	101006-02	Pilot Bracket	1
9	101330-05	Front Burner	1
10	109824-02	Rear Burner Assembly	1
11	102257-08CJ	Base Assembly	1
12	098271-06	Ignitor Cable	1
13	103410-01CK	Firebox Bottom	1
14	098867-09	Gas Regulator	1
15	101004-04	Front Burner Injector	1
16	102445-01	Piezo Ignitor	1
17	101007-01	Crossover Tube	1
18	099387-05	Pilot Tube	1
19	101972-01	Valve and Piezo Bracket	1
20	M11084-38	Regulator Hex Screw	2
21	102668-01	Front Burner Tube	1
22	101008-01	Gasket	1
23	101973-01	Inlet Tube	1
24	098276-01	1/8" Plug	1
25	101004-14	Rear Burner Injector	1
26	M11084-26	Hex Screw, #10	2
27	098508-01	Valve Retainer Nut	1
28	101628-03	Flex Hose	1
29	097809-02	Adapter	1
30	098354-01	Control Knob	1
31	102568-01	Control Valve	1
32	901056-01	3/8" Flare x 1/2" NPT	1
PARTS AVAILABLE — NOT SHOWN			
	100563-01	Warning Plate	1
	101055-02	Lighting Instructions Plate	1
	100565-01	Warning Plate Fastener	1
	101976-02	Control Position Decal	1

ILLUSTRATED PARTS BREAKDOWN

FIREPLACE
VSGF28NVA



PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 22 of this manual.

FIREPLACE
VSGF28NVA

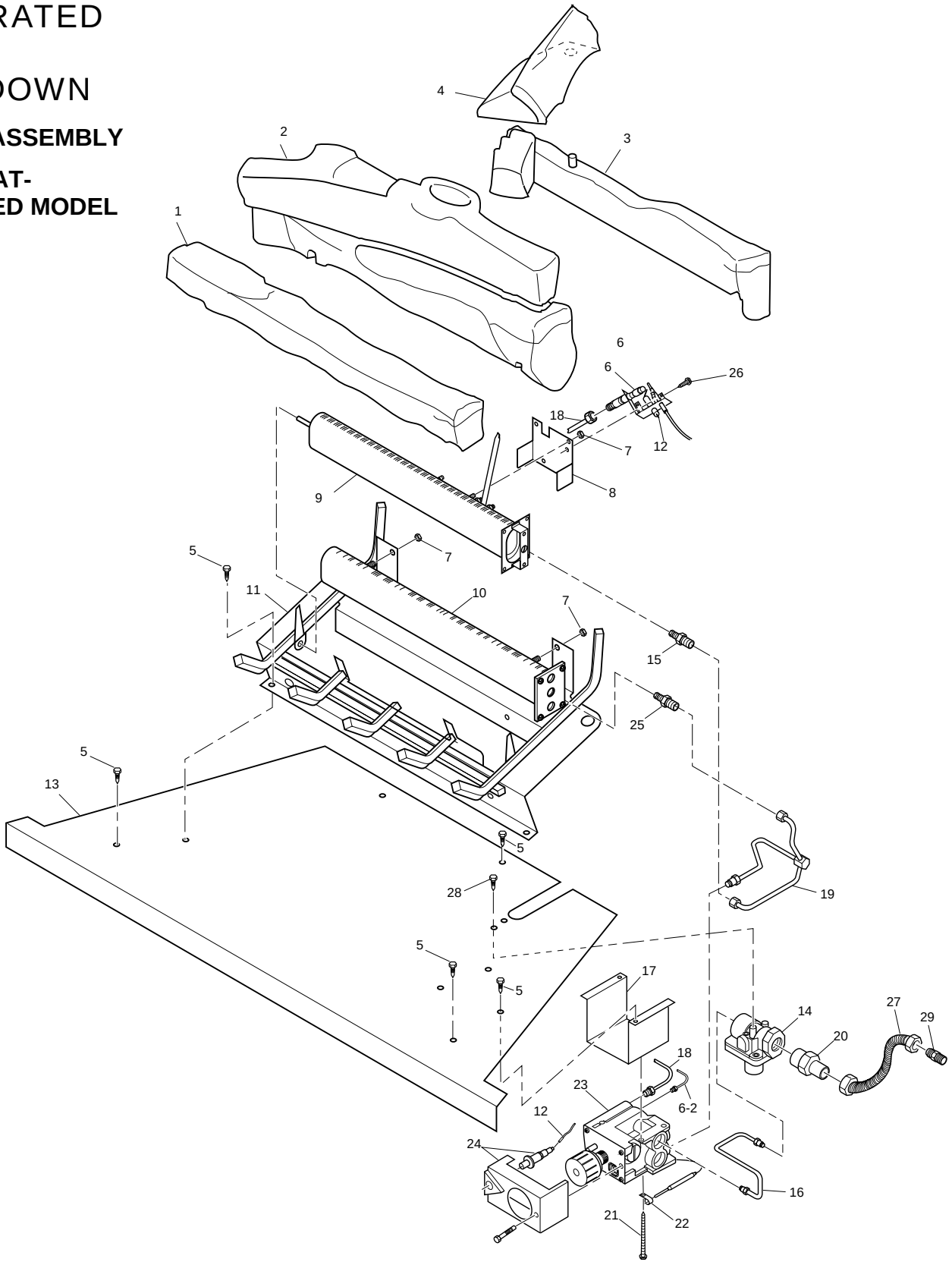
KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	101357-01	Top Outer Casing	1
2	103207-01	Outer Casing	1
3	102758-02CK	Right Front Side	1
4	102759-02CK	Left Front Side	1
5	098304-01	Phillips Pan Head Screw, #10	17
6	101351-01CK	Top Front	1
7	102455-02	Top Louver Assembly	2
8	101353-01CK	Middle Front Rail	1
9	101712-02	Firebox Hood	1
10	101348-01	Firebox Support	2
11	099230-01	Shoulder Screw	4
12	101872-03	Firebox Top	1
13	101346-01	Outer Base	1
14	101838-03CJ	Firebox Wrapper	1
15	101514-01CK	Cover	1
16	M11084-26	Hex Screw, #10	57
17	098304-03	Phillips Pan Head Screw, #8	4
18	101727-03	Screen Assembly	1
PARTS AVAILABLE — NOT SHOWN			
	100639-01	Caution Decal	1
	103590-01	Decal Strip	1
	104313-01	Hinge, Pin	1
	104313-02	Hinge, Pin	1
	M10908-2	Screw, Slotted Hex Head Tapping	4

ILLUSTRATED PARTS BREAKDOWN

LOG BASE ASSEMBLY

THERMOSTAT-CONTROLLED MODEL

VSGF28NTC



PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 22 of this manual.

LOG BASE ASSEMBLY

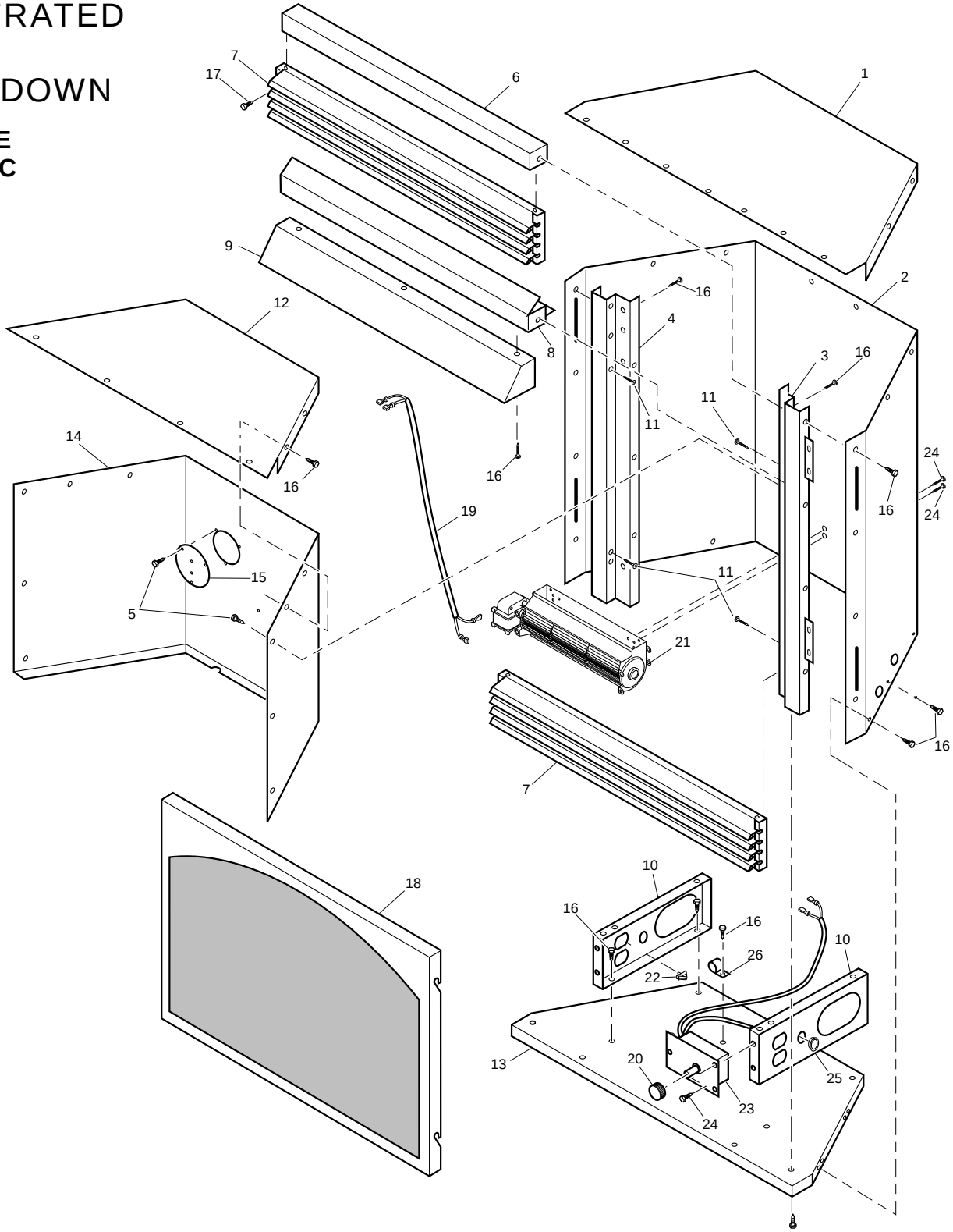
THERMOSTAT-CONTROLLED MODEL

VSGF28NTC

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	104388-02	Front Log (#1)	1
2	104390-02	Middle Log (#2)	1
3	104392-02	Rear Log (#3)	1
4	104394-02	Crossover Log (#4)	1
5	098304-01	Screw, #10 Phillips, Black	8
6	104285-01	ODS Pilot	1
7	098249-01	Nut	4
8	101006-02	Pilot Bracket	1
9	101330-05	Front Burner Assembly	1
10	109824-02	Rear Burner Assembly	1
11	102257-08CJ	Base Assembly	1
12	098271-06	Ignitor Cable	1
13	103410-01CK	Firebox Bottom	1
14	098867-09	Gas Regulator	1
15	101004-04	Front Burner Injector	1
16	102845-01	Inlet Tube	1
17	101382-01	Thermovalve Bracket	1
18	099387-03	Pilot Tube	1
19	102846-01	Burner Tube	1
20	097809-02	Adapter	1
21	099211-01	Screw	2
22	098544-01	Thermostat Clamp	1
23	101329-14	Thermostat Gas Valve Assembly	1
24	101381-01	Cover and Piezo	1
25	101004-14	Rear Burner Injector	1
26	M11084-26	Hex Screw, #10	2
27	101628-03	Flex Hose	1
28	M11084-38	Screw	2
29	901063-01	3/8" Flare x 1/2" NPT	1
PARTS AVAILABLE — NOT SHOWN			
	100563-01	Warning Plate	1
	101054-01	Lighting Instructions Plate	1
	100565-01	Warning Plate Fastener	1

ILLUSTRATED PARTS BREAKDOWN

FIREPLACE
VSGF28NTC



PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 22 of this manual.

FIREPLACE
VSGF28NTC

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	101357-01	Top Outer Casing	1
2	103207-01	Outer Casing	1
3	102758-02CK	Right Front Side	1
4	102759-02CK	Left Front Side	1
5	098304-01	Phillips Pan Head Screw, #10	17
6	101351-01CK	Top Front	1
7	102455-02	Top Louver Assembly	2
8	101353-01CK	Middle Front Rail	1
9	101712-02	Firebox Hood	1
10	101348-01	Firebox Support	2
11	099230-01	Shoulder Screw	4
12	101872-03	Firebox Top	1
13	101346-01	Outer Base	1
14	101838-03CJ	Firebox Wrapper	1
15	101614-02	Limit Switch (thermal disk) Assy.	1
16	M11084-26	Hex Screw, #10	57
17	098304-03	Phillips Pan Head Screw, #8	4
18	101727-03	Screen Assembly	1
19	101398-03	Wire Harness	1
20	103650-01	Control Knob	1
21	103581-02	Blower Assembly	1
22	099123-01	Wire Clip	4
23	105649-01	Blower Speed Control	1
24	M11084-38	Hex Screw, 8-18 x .38"	4
25	101629-01	Plastic Bushing	2
26	098544-01	Clamp	1
PARTS AVAILABLE — NOT SHOWN			
	099038-01	Strain Relief Bushing	1
	100639-01	Caution Decal	1
	103590-01	Decal Strip	1
	104313-01	Hinge, Pin	1
	104313-02	Hinge, Pin	1
	M10908-2	Screw, Slotted Hex Head Tapping	4

WARRANTY INFORMATION

KEEP THIS WARRANTY

Model _____

Serial No. _____

Date Purchased _____

Always specify model and serial numbers when communicating with the factory.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

LIMITED WARRANTY
VENT-FREE NATURAL GAS FIREPLACE

DESA International warrants this product to be free from defects in materials and components for four (4) years and five (5) years on stainless steel burners from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA International who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective heater will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON ALL COMPONENTS AND FIVE (5) YEARS ON STAINLESS STEEL BURNERS FROM THE DATE OF FIRST PURCHASE; AND DESA INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNATIONAL SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For information about this warranty write:

DESA™
INTERNATIONAL
2701 Industrial Drive
P.O. Box 90004
Bowling Green, KY 42102-9004
www.desatech.com

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